



## *Survey/GPS Catalog*



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***We understand the value of the relationship we have with our clients. You are our most important asset. We will work very hard to make sure that we provide the courtesy, attention and satisfaction that you would expect from a professional organization. You will receive ...***

- ***Outstanding customer service***
- ***The highest quality products***
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***We want to take this opportunity to thank you for your support over the past 12 years.***

***...Thank You!***

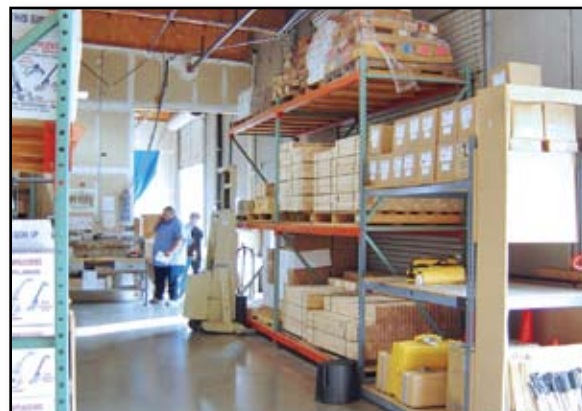
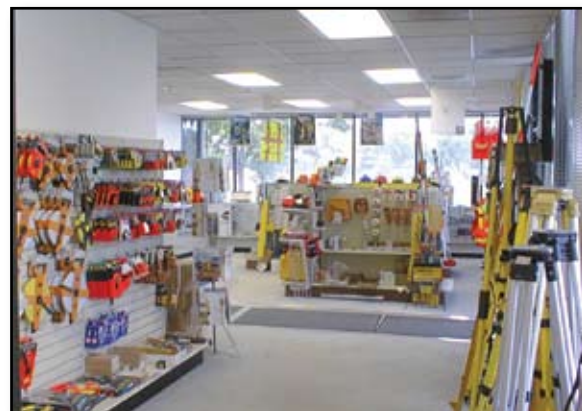


Topcon California has approximately 4,000 square feet dedicated to your supply needs! We make every effort to ensure that your order is handled quickly and correctly!

We are very proud of how pleasantly surprised our customers are when they visit our facility. It's very common to hear, "This is just like a candy store!"

Be sure to visit [www.topconca.com](http://www.topconca.com) for:

- Product Information
- Special Sale Information
- Used Instruments
- Special Announcements
- Technical Support





# TOPCON CALIFORNIA SACRAMENTO



**Topcon California is a “factory owned” retail store. There are only two of these type stores in the entire United States. The Sacramento facility officially opened in January 1994 starting with six employees. At that time, Topcon California occupied a total space of 4,000 square feet. Today we have 25 employees and occupy approximately 10,000 square feet of space.**

# ***Survey/GPS Catalog***

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# HiPer

*Integrated GPS+ Receiver*

The HiPer® Series of integrated GPS receivers/antennas offers GPS technology options for every need and budget.

Each of the members of the HiPer® Series feature an integrated design that includes a GPS receiver, antenna, and power supply – all in a compact, waterproof, durable housing that is designed to take the bumps and bruises of the field.

Topcon's GPS+ offers GPS plus GLONASS (dual-constellation) gives you 40 percent more satellites to use, fewer headaches in the field, and the most advanced GPS signal processing and interference reduction in the industry. At the core is our Paradigm™ chip featuring 40 universal super channels that can each track all signals of either single-frequency GPS, dual-frequency GPS, or dual-frequency GPS+. Also, with 40 channels you can track up to 20 satellites at once!

## HiPer® XT RTK Integrated GPS+ Receiver

At the heart of this new system is Topcon's HiPer XT (eXtended Technology) system design. This new receiver design provides a user with two forms of RTK communication all inside one compact, lightweight housing.

The HiPer®XT incorporates both a transmit-and-receive 2-watt UHF radio and a cellular modem giving you two systems in one. Use two HiPer®XT receivers as a base and rover system for areas outside reliable digital cellular coverage. When operating in an area of reliable cellular coverage or within an RTK network system, use both HiPer®XT receivers as rover units to double your productivity and efficiency!



### Many of these features are World's Firsts:

- Completely cable free base & rover or rover & rover RTK GPS System.
- World's First 2-watt UHF Transmit & Receive system with built-in cellular modem.
- Dual-constellation (GPS+GLONASS) satellite positioning technology.
- 40 channel all-in-view signal tracking ability.
- Industry leading 20Hz fast update rate.
- Upgradeable receiver options through simple computer codes.

## HiPer® Pro Long-Range Integrated Receiver System

The innovative integrated design incorporates a transmitting UHF radio in the base receiver, eliminating the need for external radios and batteries. And there's no need to worry about UHF radio interference because Topcon's Free Channel Scan technology detects disruptive radio signals and compensates by automatically changing channels so you can keep working all day with confidence in your HiPer®Pro system.



The HiPer®Pro utilizes advanced Bluetooth® wireless technology to give you a system free of the messy cables found at many base stations. No more hassles of dealing with tangled, fragile cables from external batteries, antennas, and RTK radios because the wireless HiPer®Pro provides a complete, integrated RTK GPS system with the added benefit of extended working range.

### Standard Features:

- Completely cable-free design
- Long-range UHF radio – up to 4 miles of coverage!
- Compact, lightweight design
- Fully integrated receiver/antenna
- Dual-frequency, dual-constellation RTK GPS+ tracking





# HiPer

## Integrated GPS+ Receiver

**The HiPer® Series also incorporates our innovations in signal processing, Advanced Multipath Reduction, and Co-Op™ Tracking, making Topcon GPS+ the best in the field in under-canopy and low signal strength reception.**

### HiPer® Lite+ Integrated GPS+ Receiver System

This compact system incorporates Topcon's advanced 40-channel dual-frequency GPS technology, the Paradigm™ chip, and offers all the Topcon innovations in tracking technology such as Co-Op™ Tracking and Advanced Multipath Reduction. The HiPer® Lite+ also incorporates our Euro-80 GPS board and is designed for dual-frequency GPS tracking.



#### HiPer® Lite+ Features:

- Super-fast and easy base station setup – tripod, tribrach, and HiPer® Lite+ – you're done!
- Cable-free rover works with Bluetooth® wireless technology equipped field controllers
- Integrated spread spectrum radio works with HiPer® Lite+ and standard HiPer® Lite rovers up to 1.5 miles away
- No FCC licensing requirements
- 40-channel dual-frequency GPS plus GLONASS availability
- Exclusive AMR and Co-op Tracking™ technology

### HiPer®+ Integrated GPS+ Receiver System

HiPer®+ continues to offer the advantages of a small, lightweight design and the power of dual-constellation satellite tracking. In addition, the HiPer®+ boasts wireless communication and an advanced center-mount UHF antenna design that boosts RTK performance and distance without any degradation of GPS signals!



Now available with GSM modem option! The new HiPer®+ now can be ordered with either internal radio or with internal GSM cell phone communications. With GSM, just add a SIM card from a domestic service provider and TopSURV™ GPS+ controller software to obtain rover connectivity with cell-based reference station networks and long-range RTK without radios.

- A data plan from a cellular service provider is required to use GMS communications.
- Service providers that currently offer GMS/Data capabilities and SIM cards are: AT&T, T-Mobile, and Cingular Wireless. Nextel offers GMS service but no SIM cards necessary for HiPer®+.
- Contact a service provider for coverage maps and more information.

### HiPer® L1 Single-Frequency Receiver

Unlike other static GPS systems, the Topcon HiPer® L1 is easily upgradeable to full-time dual-frequency L1+L2 with a simple computer code that you can load yourself. Should you decide to go to full dual-frequency RTK, you can easily upgrade the HiPer® L1 with an internal PDL radio.



- Completely upgradeable system without having to swap out hardware.
- Full dual-frequency measurements standard on "Cinderella" days.
- Customizable system design with memory options up to 96Mb.
- 40 channel GPS receiver technology (Paradigm™ technology).
- Advanced Co-Op tracking for unsurpassed under-canopy performance.

# Millimeter GPS™

**World's first millimeter-accurate GPS system – up to 300 percent more accurate than standard GPS!**

Imagine taking your GPS rover and transforming it into a super-precise measuring device that rivals a robotic total station. Or enabling your highly productive 3D-GPS+ stake less grading systems to speed through your highest precision work. At a fraction of the cost of a robotic total station system, and without the single-user limitation.

Simply set up your Topcon RTK GPS+ system as usual, add a wireless PZS - 1 sensor to your mobile rover, and set up the PZL - 1 transmitter to get instant millimeter accurate elevations anywhere in the LazerZone™.

## PZL-1 Transmitter

Positioning Zone Laser transmitter sets up and operates much like a standard rotating laser but transmits a unique LazerZone™ signal to provide a working range of 2,000ft plus an incredible measuring area of 33ft in height! Link up to four laser transmitters for use on large sites to cover a distance of nearly 8000ft with elevation changes of more than 130ft. Multiple rovers can use the same transmitter, even at different elevations for continuous production.



<b>Zone Width</b>	±10° (0-30m), ±5m (30-300m)
<b>Zone Radius</b>	300m (985ft)
<b>LazerZone Accuracy</b>	Vertical: 1 arc second resolution
<b>Self-Leveling Range</b>	±5°
<b>Rotation Speed</b>	600rpm
<b>Laser Class</b>	Class 1
<b>Channels</b>	4
<b>Plumb Beam</b>	Yes
<b>Bluetooth® Wireless</b>	Yes
<b>I/O Port</b>	RS-232C
<b>Power Supply</b>	Rechargeable Ni-MH (w/runcharge) 4 "D" Cell Batteries
<b>Operating Time</b>	Approx. 20 hours (alkaline) Approx. 15 hours (rechargeable)
<b>Waterproof</b>	IPX6
<b>Operating Temperature</b>	-20° to +50°C

## PZS-1 Rover Sensor

Instantly computes precise vertical information from the PZL-1 laser transmitter. Automatically determines elevation based on your job site control, eliminating the need for a movable mast or grade rod. Mount the PZS-1 to your range pole, where it receives the PLZ-1 laser signal and wirelessly transmits data to your existing HiPer rover.



<b>Beam Detection</b>	±10° by ±10° window
<b>Channels</b>	4
<b>I/O Port</b>	RS-232C
<b>Mounting</b>	5/8 x 11 Thread
<b>Waterproof</b>	IPX6
<b>Operating Temp</b>	-20° to +50°C
<b>Power Supply</b>	BT-59Q Camcorder Battery
<b>Operating Time</b>	Approx. 8 hours
<b>Weight</b>	Approx. 1 kg



## Millimeter GPS™

### 99-051103-01 Millimeter GPS™ LazerZone™ System Complete

Consisting of:

- 99-051101-01 LazerZone Transmitter & Receiver w/case
- 30-034121-01 LazerZone Tripod w/bag
- 30-034131-01 LazerZone Accessory kit w/bag  
(1.83-2.0M Lazer-Zone composite rover rod, LazerZone bipod, & accessory bag)

### 99-051101-01 LazerZone™ Transmitter & Receiver w/case

#### 57099 PZL-1 Laser w/ TopSURV Millimeter GPS module

Consisting of:

- 56999 - AC/DC converter AD-9B (120V) for PZL-1
- 57103 - Battery Pack BT-63Q for PZL-1
- 57104 - Battery Holder DB-63C for PZL-1

#### 57101 PZS-1 Sensor

Consisting of:

- 57105 - PZS Plug
- 57106 - Sensor cable JC-8
- 60241 - Battery Charger BC-30 for PZS-1
- 60259 - Battery Pack BT-62Q for PZS-1

### Controllers and Software

Part No	Description
60322	TopSURV Millimeter GPS+ Software Module
60286	FC-100, 64MB w/ TopSURV Pro GPS+
60288	FC-100, 64MB w/ TopSURV Complete
60287	Wireless FC-100, 64MB w/ TopSURV Pro GPS+
60289	Wireless FC-100, 64MB w/ TopSURV Complete
60278	FC-100, 128MB w/ TopSURV Pro GPS+
60280	FC-100 128MB w/ TopSURV Complete
60279	Wireless FC-100, 128MB w/ TopSURV Pro GPS+
60281	Wireless FC-100, 128MB w/ TopSURV Complete
60328	FC-2000 128MB w/ TopSURV Millimeter GPS+
60329	BT Wireless FC-2000 w/128MB w/ TopSURV Millimeter GPS+
60330	FC-2000 128MB w/TopSURV Pro Millimeter GPS+ (w/Roading)
60331	BT Wireless FC-2000 w/ 128MB w/TopSURV Pro Millimeter GPS+
60332	FC-2000 128MB w/ TopSURV Complete
60272	TopSURV GPS+
60273	TopSURV Pro GPS+ w/ Roading
60336	TopSURV Millimeter GPS+
60352	TopSURV Pro Millimeter GPS+(w/ Roading)

### Accessories

56999	AC/DC Converter AD-9B (120V)
60241	BC-30B (120V) Battery Charger
60259	BT-62Q Battery, FC-100
14-008051-01	PZS-1 - Leg E/Ody E/GB Series cable
30-034111-01	2M LazerZone fixed height tripod
22-034102-01	1.83 - 2.0M LazerZone composite rover rod
22-034103-01	.5 Meter Composite rod extension
22-034104-01	LazerZone accessory bag
22-034105-01	Tripod Bag

**LAZER ZONE**

# GB

## Modular GPS+ Receivers

**The GB-500 and GB-1000 provide an advanced Topcon dual-frequency, dual-constellation, GPS+ receiver board design inside a rugged, compact housing.**

**Also, through the use of Options Authorization Files, a customer can select from a wide variety of options to activate in the receiver to meet their exact needs.**

### GB-500



The GB-500 provides advanced Topcon dual-frequency, dual-constellation, GPS+ receiver board design inside a rugged, compact housing featuring a simple MINTER display with LEDs providing satellite tracking, battery, and recording status.

At its core is our Paradigm® chip featuring 40 universal super channels that can each track all signals of either L1 or L2 GPS frequencies. It incorporates our new innovations in signal processing, multipath mitigation and co-op tracking, making Topcon GPS+ the best in the field for under-canopy and low signal strength reception.

### GB-1000

The GB-1000 offers a built in LCD display and operation panel. This display and interface is ideal for checking satellite and receiver status, initializing RTK base operation, or managing static surveying operations.

The GB-1000 also provides a Compact-Flash memory card slot and advanced communication support. With USB, serial, and Ethernet connections, nearly all communication links are supported including LAN, WAN, and Internet connectivity.

At its core is our Paradigm® chip featuring 40 universal super channels that can each track all signals of either L1 or L2 GPS frequencies. It incorporates our new innovations in signal processing, multipath mitigation and co-op tracking, making Topcon GPS+ the best in the field for under-canopy and low signal strength reception.



**01-854502-01X GB-500 Receiver, L1 w/cables**

**01-854402-01X Assy, GB-1000 w/cables**

# GPS Antennas

The PG-A series of high-precision GPS antennas is an exciting addition to the complete line of Topcon GPS products. These GPS micro-centered antennas are available as either a standard dual-frequency, dual-constellation antenna (PG-A1) or with the addition of integrated UHF (PG-A2).

## CR-3 Zero-Centered Choke Ring GPS Antenna

The CR-3 is a zero-centered L1/L2 reference base station antenna mounted on our single-depth choke ring. It features a fully weatherproof design with an optional cone environmental cover. The CR-3 choke ring antenna brings proven technology and reliability to high-end reference station systems.



It weighs about 3.7 kg with a diameter of 32.6cm and height of 10.1cm (without cone cover). The included LNA accepts voltages from 2.7 to 12 volts and has  $32 \pm 2$  dB of gain. Output impedance of the antenna is 50 Ohms. Frequency ranges are from 1565 to 1620 MHz and 1217 to 1260 MHz and the antenna has N-type connectors.

<b>Features</b>	L1/L2; GPS/GLONASS; Reference base station antenna with choke ring; Ground Plane; Zero Centered
<b>Frequency</b>	Range 1: 1217-1260 MHz Range 2: 1565-1620 MHz
<b>Weight</b>	3700 or 4100 with conic cap grams
<b>Dimensions</b>	326 x 101 w/o cap mm
<b>DC Voltage</b>	Range: 02/07/2012 Volts mA@current supply: 45@3 mA@typ.
<b>LNA Gain</b>	$32 \pm 2$ db
<b>Output Imp.</b>	50 Ohm
<b>Connector</b>	N-type
<b>Operating Temp</b>	Range: -40 to +55 degrees Celsius

Topcon continues its lead in GPS technology with the compact and ultra-rugged PGA antennas. These high precision GPS micro-centered antennas are available as either a standard dual-frequency, dual-constellation antenna (PG-A1) or with the addition of integrated UHF (PG-A2).

## PG-A1 Dual-Frequency/Dual-Constellation Antenna

The PG-A1 is a precision dual-frequency, dual-constellation antenna featuring precision micro-center technology and an integrated ground plane to help eliminate errors caused by multipath. The PG-A1 was designed to accompany the Topcon modular receivers such as the Legacy-E, Legacy-H and Odyssey-RS.



## PG-A2 Integrated UHF Antenna

The PG-A2 is the first antenna to provide both dual-frequency, dual-constellation satellite tracking and integrated UHF antenna for maximum communication range, all in one compact, durable design.

The PG-A2 is a precision dual-frequency, dual-constellation antenna with integrated UHF and featuring precision micro center technology and an integrated ground plane to help eliminate errors caused by multipath. The PG-A2 was designed to compliment the Odyssey-E integrated receiver, UHF radio and Windows CE controller.





# GMS

## GIS Mapping System

**Incorporating advanced technology not found in other hand-held GPS units, the GMS-2 truly represents the next generation of a compact satellite positioning receiver.**

**Topcon engineers have incorporated our industry leading dual-constellation satellite tracking into a small hand-held GPS receiver, the new GMS-2.**

### GMS - 2 GIS Mapping GPS Receiver

This innovative new system also provides an integrated electronic compass and digital camera powered by Topcon's revolutionary imaging technology. This powerful combination of dual-constellation satellite performance and digital imaging technology has set a new standard for GIS field mapping.



- Dual-Constellation Satellite Tracking
- Integrated Digital Camera & Electronic Compass
- Dual-use Performance as GIS Receiver or Field Controller
- Internal Bluetooth® Wireless Technology Connectivity
- Ultra Sharp Color TFT Touch Screen

Powered by Topcon's TPSCORE® GPS chip technology, the GMS-2 provides 50 channel tracking capability, for both GPS and Glonass satellite systems. The TPSCORE® chip technology also provides dual-purpose signal tracking for either meter-level GIS mapping applications, or single-frequency carrier tracking for high-accuracy static positioning. With an optional external L1 antenna, the GMS-2 can perform post processed surveying applications for accuracies better than 1cm.

In addition to being a stand-alone mapping grade receiver, the GMS-2 can also utilize external correction services for real-time DGPS. The GMS-2 provides access to the WAAS correction service as a standard feature. Using its internal Bluetooth® connection, the GMS-2



can be configured to connect to a regional GPS CORS network through a Bluetooth enabled cell phone. When utilizing the optional Topcon BR-1 Coast Guard Beacon Receiver, the GMS-2 can correct its raw GPS location for real time location, mapping, and navigation applications.

A significant advantage of the GMS-2 is its ability to perform multiple roles. With its Windows CE® operating system, a GMS-2 can also be configured to be a field controller running the full suite of Topcon's TopSURV software to work with total stations and RTK GPS systems. With the addition of the survey & GPS modules for TopSURV, our GMS-2 can be used as either a stand-alone GIS receiver, or part of an integrated system, providing flexibility not found in competing systems.

## GMS GIS Mapping System

The Topcon GMS series was designed to provide a compact, rugged GIS Mapping system that incorporates all of the primary position correction services – Beacon, WAAS, EGNOS, and OmniSTAR®-VBS.

Utilizing Topcon's integrated system design and Bluetooth® wireless technology, the GMS-110 and the GMS-200 bring the versatility of a backpack GIS solution without the mess of external cables and components. The GMS receiver systems also provide your choice of field data controller.

Users can also choose between ESRI's ArcPad field solution for the advanced GIS maintenance professional, and Topcon's TopSURV-GIS for the surveyor-friendly GIS data-acquisition system. Both software systems are available on Topcon's rugged FC-100 Windows® CE color touchscreen field computer.

### GMS - 200 Multi-Purpose GIS/Mapping System

The GMS-200 system comes configured as a complete backpack system. At the heart is the new Map-HP receiver. Within its HiPer-sized, lightweight housing, Topcon has packed a wealth of unbelievable technology. Consisting of a Map-HP receiver with cables and charger, GPS L1/L2 data option, 10Hz RTK, WAAS option, internal PacCrest compatible radio, 4Mb internal data storage, Omnistar VBS/HP capable, MG-A2 antenna with adapter, and GIS backpack w/pole. Just add an FC-100 or FC-2000 field computer for a complete system!



- Built around our survey grade T112 GPS board, the same powerful and reliable one used in all of our popular HiPer series!
- Internal batteries eliminate cable hassles and provide 15 hours of continuous use.
- MG-A2 antenna delivers dual-frequency and L-band reception in a waterproof, small enclosure!
- Integrated Bluetooth® communications!
- Omnistar®-VBS service delivers sub-accuracy while Omnistar HP is under 10cm accuracy!
- It's RTK-ready with internal, PacCrest compatible, UHF radio for centimeter level survey-grade accuracy!

### GMS - 110 Multi-Purpose GIS/Mapping System

The new Topcon GMS-110 system was designed to provide a compact, rugged GIS Mapping system that incorporates all of the primary position correction services – Beacon, WAAS, EGNOS, and OmniSTAR®-VBS. Utilizing Topcon's integrated system design and Bluetooth® wireless technology, the GMS-110 brings the versatility of a backpack GIS solution without the mess of a bunch of external cables and components.



- Sub-meter accuracy with real-time differential correction from Omnistar®-VBS and Navigation Beacons.
- Omnistar® satellite differential correction provides wide area coverage.
- Coastal navigation beacons provide free differential correction over most of North America and Europe.
- WAAS and EGNOS ready.



# Post-Processing/Networking Software

**Topcon Tools provides the data processing capabilities you need for your GPS system. With it, you get a powerful, easy-to-use solution for post-processing and adjustments for Topcon and RINEX data!**

**Topcon's TopNet also breaks new ground as the world's first reference station software suite to offer dual-constellation GPS+GLONASS data capability.**

## Topcon Tools Post-Processing and Adjustment Software

Topcon's new Topcon Tools software provides a powerful post-processing solution with an intuitive operator interface that's easy to learn and use. Impressive data automation routines take much of the hassle out of GPS processing and get you the right answer fast!

Graphical Windows® based screens provide a map view of your project along with sortable tables of observation and vector information. With user-defined reports and customizable job configurations, Topcon Tools can process and report data for specific projects and users. Powerful data checking and editing is at your fingertips!

### Post Processing

- Topcon GPS+ data processing
- RINEX data processing
- Direct import of data from Topcon receivers using Topcon Link™
- Graphical map interface and tabular view of data
- Customizable job configurations
- Customizable point and baseline reports

### Adjustments

- Least squares network adjustment of GPS+ data
- Extensive projection support and Geoid 99 support
- Customizable adjustment
- Export to industry standard formats

### Import Data From:

- All Topcon GPS and GPS+ receivers
- RINEX data from any GPS receiver
- NGS data sheets
- ASCII control files

## TopNET Reference Station Software

A key component of the modern GPS industry is the fixed reference station, and Topcon's innovative TopNet reference station software suite is the perfect solution to meet this growing need.

- Communication to reference stations via Internet, modem, USB or serial
- Configuration of reference stations and site perimeters including remote firmware upload.
- Configuration of DGPS/RTK local broadcast from each reference station
- Configuration of data logging for each reference station
- Automatic and manual file download from each reference station
- Automatic and manual push to FTP site(s) of raw and/or RINEX data files
- Monitoring of satellite and site parameters
- Automated message sending on alarm via email

Topcon can provide a suite of TopNet products offering a wide range of functionality scalable – from a single site to networks covering a large geographical area. TopNet can be configured to provide complete control over a single CORS site or a network of CORS sites with additional options, giving you GPS+ RTK correction data generated using information from all reference stations to model and reduce errors, thereby improving precision and productivity.

Just place your static GPS+ antenna on the roof of your building, link the cable from the antenna to the Odyssey-RS receiver in your office, and TopNet will collect periodic positioning data automatically. Combine this data with the information collected by your survey rovers in the field, and TopNet processes the combined data in no time. With TopNet you can log, archive, and post raw data files, convert RINEX, and upload native raw files and RINEX files to an FTP site, all under the security and control of a designated system manager.





# Total Stations

Topcon provides the most technologically advanced surveying instruments. With features such as the world's first and only optical robotic communication systems, dual-optical reflectorless operation, on-board Windows® CE data collection and wireless remote data collection, our priority is your productivity.

## GPT-8200A Reflectorless Robotic

For the times when the job site or circumstances make using a prism inconvenient or dangerous, the GPT-8200 utilizes pulse-laser technology for the highest accuracy reflectorless operation. Using a standard prism, the GPT-8200 can measure a full 23,000 feet.

- Advanced reflectorless EDM design with two mode operation.
- Completely cable-free operation with wireless RC-2II.
- Radio-free optical data communication
- Sophisticated tracking technology without expensive, special prisms.
- Innovative Movement Anticipation tracking technology.



## GPT-8203M Reflectorless Robotic

The GPT-8203M instrument is covering new ground in the construction business. Utilizing the remarkable reflectorless range EDM of the standard GPT-8200 series, the M instrument brings long-range measurement into range for construction customers.

The GPT-8203M also boasts proven servo-driven technology that can turn the instrument very quickly to the next stakeout point.

- 7 speed servo-motor technology
- 1200 meter reflectorless range
- Easy to use onboard software
- Cable-free design
- Guide lights
- Upgradeable to robotic



Onboard software of the GPT-8203M is also intuitive. The onboard software package makes upload and download of points easy. With little more than a blueprint, you can input your coordinates for the job and get them marked on the ground. You can also easily replace a knocked-out hub quickly.

Some of the advanced features of the onboard software are; batterboard calculation, tape dimension, and roading with templates and alignments, all of which can be very helpful on the modern job site.

## GTS-820 Auto-Targeting/Auto-Tracking

Speed, precision, versatility, reliability. The new GTS-820 series puts it all in a package to deliver the highest productivity day after day, in all field conditions. Compare it to any other robot. Sight the prism, activate the unique Topcon "wide beam" tracking system and the instrument locks on and follows the reflector wherever it goes. The fast servo-motors will track the prism at a speed of more than 12 degrees per second, a full 20 percent faster than previous models.

The GTS-820 now features advanced CCD tracking technology which incorporates Movement Anticipation technology. This keeps the beam stuck to the prism for unprecedented tracking accuracy. It is available in three models; the GTS-821A (1-second angle accuracy), the GTS-823A (3-second angle accuracy), and the GTS-825A (5-second angle accuracy).



# Total Stations



## GPT-7000i Imaging

Capture reality – don't just measure it! With its integrated digital camera technology, the new Topcon GPT-7000i imaging total station makes your field data come alive. Captured job site photos are incorporated into your measurement data, or use the onboard imaging technology to superimpose design points or stakeout points. By adding optional digital imaging software you can combine multiple job site photos and create 3D models and point clouds!



- Dual-view integrated CCD camera: wide and finder view
- Windows CE.NET 4.2 operating system
- Extra-large QVGA LCD TFT color display
- Pinpoint reflectorless measuring up to 250m
- Single prism measuring up to 3000m

## GPT-7000 Reflectorless

The GPT-7000 series provides everything you need in a complete reflectorless field solution including advanced lithium-ion battery, removable Compact Flash data card, and powerful on-board software. Finally, an on-board solution that makes hands-free surveying a reality, with advanced reflectorless capability that outperforms all other instruments in its class! The GPT-7000 series, only from Topcon!



The GPT-7000 series gives you up to 1200m reflectorless range, the longest in its class! Measure up to 3000m with a prism. The unique dual optical EDM design takes pulse laser reflectorless measurement to a higher level. Even at long distances, it maintains focused beam accuracy and allows you to measure only the target you select.

## GTS-720

The GTS-720 series provides everything you need in a complete field solution including advanced lithium-ion battery, removable Compact Flash data card, and powerful on-board software. Finally there is an advanced field solution without the added expense of a data collector.

By adopting the latest Windows® CE technology, Topcon brings the advantages of the GUI (Graphical User Interface) to a total station. Whether you are an experienced user or just a beginner, the graphical interface and intuitive design will allow you to get up and running in no time.



# Total Stations

Topcon is known for its innovation and cutting edge optical equipment. We offer a full line of optical instruments designed using our exclusive optomechatronic technologies.

## GTS-230W Wireless Total Station

Like Topcon's GTS-220 Series, the GTS-230W Series is loaded with standard features including a long-life 10-hour NiMH battery, a "Point Guide Feature" to allow fast alignment in staking tasks, and a laser plummet to help make setup fast and easy. Even wireless operation is standard with the GTS-230W Series, so you don't have to worry about messy or tangled cables slowing you down!

On board data collection, handy application programs, and increased distance range and EDM accuracy complete this package that's been designed to speed up your work while ensuring accuracy and ease of use.



## GPT-3000W Wireless, Dual-Optical

With the GPT-3000W series reflectorless total stations, Topcon gives you the convenience of wireless technology on the total stations with the longest reflectorless range in their class. The GPT-3000W series provides the highest measuring precision available due to its dual-optical design, so you get incredible results every time, in all situations.

**Dual-Optical Design** — Reflectorless measuring requires a finely focused beam for pinpoint accuracy. Prisms need a wider pattern to prevent off-center measuring degradation. Topcon's dual-optical system gives you both for the maximum measuring accuracy all the time.

**Precise Pulse-Laser Reflectorless** — Topcon's pulse-laser "time-of-flight" system eliminates measuring errors caused by the overlapping signals used in phase measuring systems. Accurately measuring corners or through objects such as a chainlink fence is always fast and reliable.

**Longest Reflectorless Range** — Up to 250m, the longest reflectorless range in its class! Measures up to 3000m with a prism. The dual optical design allows you the extended range using a Class 1 laser — safe for all conditions — making it ideal for use in high-traffic and other heavily populated areas.



## GPT-3000LW Long-Range Wireless

With its revolutionary 1200m reflectorless range the 3000LW sets a new standard for EDM range, delivering the power for difficult shots that others just can't match! The new Topcon 3000LW series measures nearly four times farther than any other competing total station, once again demonstrating the technology advantages that Topcon offers.

- **1200 Meter Reflectorless Range** - Measure 300m to ANY surface.
- **Bluetooth® Communications** - Just add a FC-100 or FC-2000 with wireless Bluetooth capability and forget your cable problems forever!
- **Precise Measurements** - The ability of the 3000LW to measure long-range is significant, but real advantage of this technology is what this increased measurement power means at shorter distances.
- **Dual-Laser Optics** - one narrow beam for non-prism functions, and a broader beam when using a prism for more stable long-range measurement.
- **"On-the-Spot"** - highly focused infrared beam for a very stable, sharp spot that is less resistant to "spreading" over distance.





# Data Collectors

It may be half the size of a conventional controller, but the FC-100 is every bit as serious about helping you control and collect your critical survey, design and layout jobs.

## FC-2000 Color Windows® CE Field Controller

Topcon's FC-2000 was designed and built by Topcon, not some third-party manufacturer. The FC-2000 was built to withstand rugged use required in the field. A shockproof and waterproof design is only the beginning.

The keyboard is designed to be easy to use whether you are wearing gloves in the cold, or weathering the summer heat. The unit even has a hook on the back to hang the FC-2000 on the tripod leg!



## FC-100 Windows® CE Field Controller

The FC-100 field controller incorporates the graphical Windows® CE operating system on a crisp, bright, color touch screen display that makes your field data come alive. This powerful operating system, combined with the versatility of dual removable media for data storage and transfer; the easy-access, long-life "camcorder" style rechargeable battery; and the compact design that small on size, but not in performance, makes the FC-100 the perfect field controller for any job.



	FC-2000	FC-100
<b>Weight</b>	800 grams	600 grams
<b>Microprocessor</b>	Intel PXA255 Xscale	Intel PXA255 Xscale
<b>Processor</b>	400 MHz	400 MHz
<b>OS</b>	Windows CE.NET 4.2	Windows CE.NET 4.2
<b>Memory</b>	2 Eboot MB, 32 SDRAM MB, 128 (built in CF card) ROM MB	0.512 Eboot MB, 64 SDRAM MB, 64/128 (built in CF card) ROM MB
<b>Display</b>	QVGA (landscape) 3.5 inch color TFT Transflective type, 240 x 320 pixel dimensions	QVGA (Portrait) 3.5 inch color TFT Transflective type, 240 x 320 pixel dimensions
<b>Serial</b>	RS-232C Serial (D-sub 9) RS-232C Serial (6 pin for total-station)	RS-232C Serial (D-sub 9)
<b>USB</b>	Type B mini Ver 1.1	Type B mini Ver 1.1
<b>IrDA</b>	no	no
<b>Ethernet</b>	no	no
<b>Bluetooth</b>	Capable	Capable
<b>SD</b>	yes (memory)	yes (memory)
<b>Compact Flash</b>	1 x Type I/_ (Memory and I/O card)	1 x Type I/_ (Memory and I/O card)
<b>Batteries</b>	Li-ion rechargeable system 2200mAh/7.4V	Li-ion rechargeable system 2200mAh/7.4V

# GPS Software

**Windows® CE software for field data collection, stakeout, and control work.**

## TopSURV - Field Controller Software

This new Windows® CE software installs easily in just minutes onto the new Topcon FC-2000 field computer and Topcon FC-100, or other popular Windows® CE devices such as the At-Work Ranger, Compaq IPaq or the Panasonic Toughbook. Providing the user with an intuitive graphical user interface, TopSURV has set a new standard for field data collection, stakeout, and control work.



### Features Include:

- Internal NTRIP client added in TopSURV.
- Support Long Non-Prism mode added for GPT-3000L, GPT-7000L, and GPT-8200A Total Stations.
- Display Cut/Fill values before storing a stakeout point.
- Ability to modify the HI for Resection when accessed from the Survey menu.
- Added Coarse mode data collection to the scanning function.
- Improved communications with RC2W.

The menus and screens have been designed with the operator in mind. No hassles of hunting around for an option hidden deep inside some sub-menu. All of the important field operations and features are available at the press of a button or tap on the screen.

## TopLink™

Topcon LINK is an import/export utility that aids in the transportation of data to and from various Topcon instruments to a desktop or laptop computer where post processing applications may be used to manipulate the it.

### TopLink can be used to:

- Import files from Topcon conventional total stations, robotic total stations, CE-based total stations, TPS controllers, and TPS GPS+ receivers to a computer.
- View and edit coordinate and raw data files and TopSURV files.
- Export an Option Authorization File (OAF) from computer to TPS GPS+ receivers, coordinate data files to a total station, any files to a TPS Controller.
- Edit localization parameters.
- View Linework information and images in the TopSURV job.

### Import Data From:

- All Topcon GPS and GPS+ receivers
- Topcon total station import
- FC-2000 Data Collector
- RINEX data from any GPS receiver
- NGS Datasheets
- ASCII control files



# Theodolites & DL Electronic Levels

Topcon's DT-200 Series comes in two variations: The standard DT-200 and the deluxe DT-200L with an additional laser for precision aiming.

The innovative DT-200 Series is the world's first waterproof and dustproof digital theodolites. They can stand up to any "wet-weather" or dust condition in the field (DT-205/207/209 based on IP-66). The benefit is that you will experience no downtime on the job due to inclement weather.

## DT - 200 High-Performance Digital Theodolite

The DT-200 series integrates the same high-quality advanced absolute circle reading technology found in Topcon's high-performance total station products for more accurate field calculations; and they continue to deliver the highest quality optics and electronics you expect to find in Topcon theodolites.



Available in three affordable models delivering 5", 7", or 9" angle accuracy, there is a DT-200 theodolite perfect for any job. All models are compact and lightweight for easy portability; their simple operation provides precise measurement in a functional, hassle-free package.

## DT - 200L High-Performance Digital Theodolite

The new DT-200L Series feature the same high-quality advanced absolute circle reading technology found in Topcon's high-performance total station products, and they continue to deliver the highest quality optics and electronics you expect to find in Topcon theodolites. All this, plus the addition of a laser diode that's perfect for easy, one-person alignment jobs.

**Topcon's DL-101C/102C takes accuracy and ease of operation to a higher level with its Advanced Image Process Technology. The outstanding features make the DL-101C/102C ideal for high precision applications including the performance of 1<sup>st</sup> and 2<sup>nd</sup> order leveling and deformation monitoring.**

## DL-101C Digital Level

## DL-102C Digital Level

With two levels of accuracy (0.4mm/1.0mm), Topcon's DL-101C and DL-102C Digital Levels increase speed, accuracy and productivity in the field. Both levels store data internally or to a memory card through the standard PCMCIA slot. The internal memory is 256K and up to 8,000 points can be stored in memory. A data collector can also be connected to the DL Series RS232 port for differential leveling. Processing software that includes a high precision least squares adjustment routine is also available. Enhanced features of the DL series software include Inverted Rod Readings, Compatibility with STAR<sup>®</sup> LEVEL Software and User Defined Point Numbers.





## Auto Levels

Topcon offers a wide range of levels for the land surveyor, civil engineer, and contractor. These superiorly crafted levels come in several categories built for specific applications and designed to suit any varying degrees of functionality and budget constraints.

### AT - G Series

Topcon offers a wide range of automatic levels for the land surveyor, civil engineer and contractor. All AT-G series levels feature a magnetically-dampened compensator hung by four special mylar ribbons having superior resistance to cold, heat, and shock. The AT-G1 model features a 360° glass horizontal circle using a 25x magnification microscope to read the circle, while the AT-G2 thru AT-G7 have a standard 360° horizontal circle. All models are waterproof with a nitrogen gas sealed telescope which prevents clouding and moisture on the lens.



	AT-G1	AT-G2/G2A	AT-G3	AT-G4	AT-G6	AT-G7
<b>Telescope:</b>						
Length(mm/in.)	229/9	229/9	230/9	192/7.7	193/7.7	204/8
Image	Erect	Erect	Erect	Erect	Erect	Erect
Magnification	32x	32x	30x	26x	24x	22x
Objective Lens(mm/in.)	45/1.8	45.1.8	40/1.6	30/1.2	30/1.2	30/1.2
Relative Brightness	1.98	1.98	1.78	1.33	1.56	1.86
Field Of View	1° 20'	1° 20'	1° 30'	1° 30'	1° 30'	1° 30'
Resolving Power	2.5"	2.5"	3.0"	3.5"	4.0"	4.0"
Minimum Focus(m/ft.)	1.0/3.3	1.0/3.3	0.5/1.6	0.5/1.6	0.5/1.6	0.9/2.9
Stadia Constant	0	0	0	0	0	0.1
Stadia Ratio	100	100	100	100	100	100
<b>Automating Leveling:</b>						
Setting Accuracy	± 0.3"	± 0.3"	± 0.3"	± 0.3"	± 0.3"	± 0.5"
Compensating Range	± 15'	± 15'	± 15'	± 15'	± 15'	± 10'
<b>Accuracy</b>						
<b>1km Double Run Level:</b>						
Without Optical Micrometer (mm)	± 0.7	± 0.7	± 1.5	± 2.0	± 2.0	± 2.5
With Optical ± 0.4 Micrometer (mm)	± 0.4	± 1.0	—	—	—	—
<b>Horizontal Circle:</b>						
Diameter (mm/in.)	90/3.5	90/3.5	117/4.6	117/4.6	117/4.6	102/4.0
Minimum Division	10' (0.1g)	1° (0.1g)	1° (0.1g)	1° (0.1g)	1° (0.1g)	1° (0.1g)

### AT - 24A Automatic Level

The AT-24A is ideal for construction and surveying contractors who demand the highest levels of accuracy, reliability, and robust performance at the lowest possible cost.

The AT-24A is available as in a kit called a "Grade Pack," which includes the AT-24A Level, a carrying case, and a Topcon Tripod.



#### Telescope

Image: Erect  
Magnification: 24x  
Clear Objective aperture: 1.4 in (36mm)  
Minimum focus: 2.6 ft (0.8m)  
Stadia Constant: 0  
Stadia Ratio: 100

#### Horizontal Circle

Degrees of Graduation: 1°

#### Circular Level

Sensitivity: 8'/2mm

#### Automatic Leveling System

Setting Accuracy: ±0.5"  
Compensating Working Range: ±15'

#### Accuracy

In 1 km Double Run Level: ±2.0mm



# Accessories

Please request our “Field Supply Catalog” for a complete listing of prisms, prism accessories, rods and tripods as well as our entire line of general field supplies.

## Rover Rods

<b>5125-00</b>	Rover rod 5/8" x 11" fluorescent yellow
<b>5125-20-YEL-GT</b>	Rover rod snap lock fluorescent yellow
<b>5128-00</b>	Rover rod carbon fiber
<b>22-006003-01</b>	Litepole (aluminum rod)
<b>22-006004-01</b>	Litepole (composite)

## Rover Rod Accessories

<b>8160-00</b>	Prism pole bag
<b>5001-20</b>	Heads-up rod level
<b>56273</b>	Replacement shoe
<b>56275</b>	Topo shoe
<b>56276</b>	Large topo shoe
<b>5194-00</b>	Steel shoe w/replacement tip
<b>5194-03</b>	Steel shoe w/steel replacement tip
<b>6000-002</b>	Replacement tip for 5194-00
<b>5195-00</b>	Prism pole adjuster
<b>5131-00</b>	2' Prism pole extension
<b>91600</b>	Steel tip for Composilite prism pole
<b>91601</b>	Topo boot for Composilite prism pole
<b>91605</b>	Point & tip for Composilite prism pole

## Rover Rod and Fiberglass Adapters

<b>2080-00</b>	Female, 5" x 11" to Quick Release
<b>2090-00</b>	Female, Quick Release to 5/8" x 11" male
<b>5180-00</b>	Male, 5/8" X 11" to Male 5/8" x 11"
<b>5181-00</b>	Double female, 5/8" x 11"
<b>2131-00</b>	5/8" x 11" to 1/4" x 20"

## GPS Tripods

<b>5115-00-YEL</b>	Precise GPS Tripod fixed height
<b>5119-00-YEL</b>	Collapsible GPS Antenna Tripod
<b>5119-10-YEL</b>	Heavy Duty GPS Antenna Tripod

## GPS Cables

<b>14-008005-03</b>	Receiver to Serial DB9
<b>14-008023-01</b>	Cigarette Lighter to SAE
<b>14-008027-01</b>	Receiver to SAE
<b>14-008031-01</b>	Receiver to USB
<b>14-008016-03</b>	Receiver to SAE
<b>14-008012-01</b>	Antenna cable (3m) to Legacy-E
<b>14-008012-03</b>	Antenna cable (10m) to Legacy-E

## GPS Antenna

<b>30-050501-01</b>	HiPer Pro Antenna
<b>30-004101-01</b>	Integrated UHF Rubber Duck Antenna for HiPer
<b>30-030012-01</b>	HiPer Lite Antenna
<b>DG450BN</b>	Dual Ban Antenna 6 1/4"
<b>DXR45BN</b>	HiPer+, HiPer Pro, HiPer XT Antenna

## GPS Radio Antennas and Accessories

<b>30-000048-03</b>	PDL Antenna, 2.4dBi 410-430
<b>C01263</b>	Mobile Antenna, 2.4dBi 450-470
<b>CW4450C</b>	Whip Antenna, 5 dB
<b>B4503</b>	Machine Rover Antenna 3dB 11"
<b>A00911MOD</b>	Mag Mount 25' RF cable
<b>30-000024-01</b>	35W Radio to Legacy-E Cable
<b>30-000026-01</b>	2W Rover to Legacy-E Cable

## BATTERY GUIDE

Instrument.....	Battery
GTS-2B .....	BT-5Q #51738
GTS-2R .....	BT-17Q #51747
GTS-3B/C/D.....	BT-15Q #51749
CTS-1/2.....	BT-23Q #51725
GTS-4/ITS-1 .....	BT-20Q #51748
GTS-200/210-GPT-1003 .....	BT-32Q #51727
GTS-220/GPT-2000/3000 .....	BT-52QA #51730
GTS-300/310GPT-1001/1002.....	BT24QW#51726
GTS-600/720/GPT-6000C.....	BT-50Q #51739
GTS-510/710.....	BT-30Q #51727
GTS-800 .....	BT-56Q #60042
GMT-100 .....	BT-40Q #51719
AP-L1A.....	KIT #50093K
DL-101/102 .....	BT-31Q #52200
DM-A5 .....	BT-18Q #51728
DM-S2/S3 .....	BT-6Q #51735
DT-101/102.....	BT-35Q #53334

## Total Station Batteries

<b>51734</b>	BT-3Q Battery Pack
<b>50093K</b>	12V Battery Kit – AP-L1A/ GTS-800(consists of 50093, 50091 & 50098)
<b>50093</b>	12V Battery – AP-L1A/GTS-800
<b>50091</b>	Soft Battery Case – AP-L1A
<b>50098</b>	Power Cable – AP-L1A
<b>51719</b>	BT-40Q On-Board Battery – GMT- 100
<b>51724</b>	BT-32Q On-Board Battery – GTS-220/210/200/GPT-1003
<b>51725</b>	BT-23Q On-Board Battery – CTS-2/1
<b>51726W</b>	BT-24QW On-Board Battery – GTS-310/300/GPT-1001/1002
<b>51727</b>	BT-30Q On-Board Battery – GTS-510/710
<b>51730</b>	BT-52QA On-Board NiMH Battery – GTS-220/GPT-2000
<b>51731</b>	BT-56Q On-Board Battery – GTS-810/820/8000
<b>51733</b>	BT-2 On-Board Battery – GTS-2
<b>51737</b>	BT-3L Heavy Duty Battery – all TS & EDM
<b>51738</b>	BT-5Q On-Board Battery – GTS-2B
<b>51739</b>	BT-50Q On-Board Battery – GTS-600
<b>51746</b>	BT-14Q On-Board Battery – ET-1/2
<b>51747</b>	BT-17Q On-Board Battery – GTS-2R
<b>51748</b>	BT-20Q On-Board Battery – GTS-4/ITS-1
<b>51749</b>	BT-15Q On-Board Battery – GTS-3/B/3C/D

## DT-100 and DL-100 Batteries

<b>53334</b>	BT-35Q Battery – DT-100 Series
<b>52200</b>	BT-31Q Battery – DL-100 Series

## GPS Magnetic Mounts

<b>5114-01</b>	Mag Mount- 3 magnets with quick release disconnect
<b>5114-50</b>	Mag Mount- single magnet with 5/8" X 11"
<b>5114-51</b>	Mag Mount- single magnet with quick release disconnect
<b>5111-01</b>	"Short" Quick Release Disconnect Adapters

## GPS Vehicle Brackets

<b>5114-20-YEL</b>	Truck Door Bracket to hold rover rod & antenna
<b>5198-51</b>	ATV Pole Bracket w/o Radio Pole

## Power Cables

<b>51750</b>	Battery Cable 1 for GTS-10D/DM-C2
<b>51752</b>	Battery Cable 3, Lemo Style/GTS-2/DM
<b>51753</b>	Battery Cable 4, 4-Pin Style GTS-/4/300/600/700/800ITS/ET
<b>51754</b>	Battery Cable PC6 for BT-3L

## Chargers & Converters

<b>51722</b>	Auto Converter 5-12V to 8.4V
<b>51740</b>	BC-4 Lemo Style 120V Battery Charger
<b>51741</b>	BC-10B 4 Pin Charger 120V
<b>51742</b>	BC-5 Quick Charger 4 Pin only 120V
<b>51743</b>	BC-6 Heavy Duty Charger f/BT-3L
<b>51744</b>	BC-10C 4 Pin Charger 230V
<b>51755D</b>	BC-20BR Chgr. for GTS-310/510/710/GPT-1001/1002 120V
<b>51756</b>	BC-20CR Chgr. for GTS-310/510/710/GPT-1001/1002 230V
<b>51757</b>	BC-27BR Chgr. for GTS-800/8000/600/220 120V
<b>51758</b>	BC-27CR Chgr. for GTS-800/600/220 230V
<b>51769D</b>	BC-19BR Chgr. for GTS-210/200/2/2B/GMT-100/ GPT-1003/DL-100
<b>52210</b>	BC-23B Standard Charger for DL-100 Series
<b>53345</b>	BC-26 Chgr. for DT-100 Series Univ. Charging System
<b>51700</b>	Universal Charger Base without cable
<b>51701</b>	Cable, 3 Pin for GTS-220/600/800
<b>51702</b>	Cable, 4 Pin for GTS-3/4/ITS1
<b>51703</b>	Cable, 2 Pin for GTS-210/200
<b>51704</b>	Cable, 2 Pin for GTS-310/510/710/GPT Series
<b>51705</b>	Cable, 2 Pin LEMO Style
<b>51720</b>	110 VAC Wall Adapter
<b>51766</b>	Battery Cable with Clips
<b>51767</b>	Voltage Reg. Module w/10' Cable/Clips for GTS-800

## 12 Volt Charger

<b>BPS1272</b>	12 Volt Charger, 7.2Ah
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## Eyepieces and Filters

<b>51311</b>	Solar Reticle for GTS-210/200/GPT-1003
<b>51321</b>	Solar Reticle for GTS-2/2B/2S/ET-1/2
<b>51341</b>	Solar Reticle 6 for IT-S1/GTS-4/800/600/220/310/510/710/ GPT-1002/1002/GMT-100
<b>51351</b>	Solar Reticle for GTS-3/3B/3C/3D/2R
<b>51332</b>	Solar Filter for GTS-210
<b>51331</b>	Solar Filter for GTS-200
<b>51322</b>	Solar Filter for GTS-2/2B/2S/ET-1/2
<b>51344</b>	Solar Filter "Flip Up" for GTS310/510/710/800/ 600/220GPT Series/GMT-100
<b>51352</b>	Solar Filter "Flip Up" 3, for GTS-3B/3C/3D/3C/2R
<b>51363</b>	Solar Filter "Flip Up" 5, for ET-1/2/GTS-2B
<b>51318</b>	Diagonal Eyepiece for GTS-210/200/CTS-1/2
<b>51320</b>	Diagonal Eyepiece for GTS-2/2B/2S
<b>51330</b>	Diagonal Eyepiece for ET-1/2
<b>51340</b>	Diagonal Eyepiece for GPT/310/510/800/600/220
<b>53331</b>	Diagonal Eyepiece for DT-100
<b>55301</b>	Eyepiece Prism with Darkener for DT100/100L
<b>55303</b>	Roof Plummet for DT-100



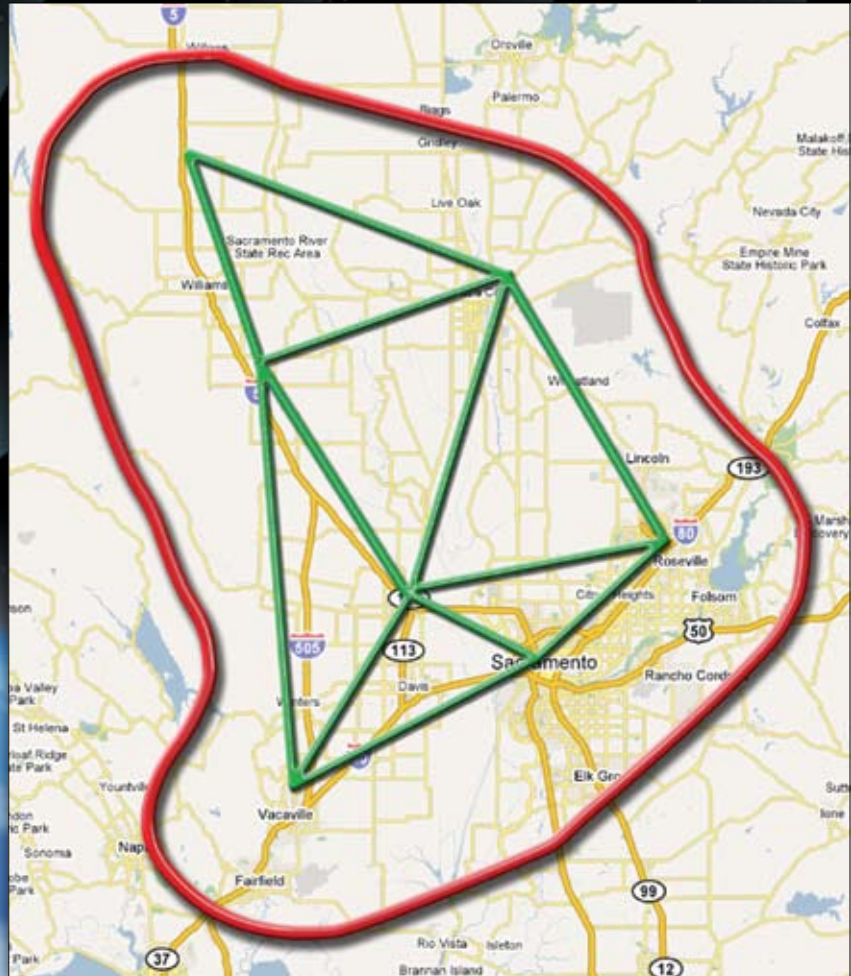


# RTK Network

**Topcon California is very proud to announce the exclusive availability of the only dual-constellation - GPS and Glonass - RTK network in California. We designed our network with reasonable baseline lengths allowing us to yield the highest possible accuracy as well as excellent coverage.**

**Working within our network provides cost-effective operating costs as well as great conveniences. GPS and GLONASS bring you higher productivity by giving you access to more than 40 satellites. Below are some other key factors to take into consideration.**

- **Save 50% on your initial investment not having to purchase a base.**
- **Eliminate having to set up a base station get peace of mind not having to worry about security concerns of the base.**
- **How about the unbelievable convenience of simply stepping out of your vehicle and in just a few short minutes or seconds getting a fixed position.**
- **Think about not having to deal with crowded UHF frequencies!**



**The annual subscription fee is very reasonable as is the wireless service. When all things are considered, this method of surveying is extremely cost effective. Check us out!**

**We have just added a new reference station in the Vacaville area providing expanding coverage into Solano County.**

**We are interested in growing our network to meet the demand. If you are interested in hosting a base at your location, be sure to contact us.**

**Be a part of the Topcon California network!**





## GPS+ "RTK" Receiver Systems

### RTK Package

- 1- Base Receiver
- 1- Rover
- 1- Controller
- 1- Tribrach Adapter
- 1- Optical Plummet Tribrach
- 1- TP-10 Tripod
- 1- Rover Rod
- 1- Bi-Pod
- 1- Download PC software

RTK Accuracy  
10mm + 1.5 ppm  
horizontal  
20mm + 2 ppm  
vertical

### RTK Rover only

- 1- HiPer w/integrated antenna, radio and batteries
- 1- Controller w/Rover rod & bracket

## Network "RTK" Receivers

### Network "RTK"

### Rover System Package

- 1- Network Rover
- 1- CDMA Modem
- 1- Controller
- 1- Download PC Software

1<sup>st</sup> Rental  
2 day  
minimum  
(includes training)

## Data Collection & Accessories

### Data Collection Systems

FC-100 w/TopSurv  
(Topcon cable, PC cable, TopLink)

FC-2000 Collection System  
(Topcon cable, PC cable, TopLink)

RANGER Collection System  
(Topcon cable, PC cable, Survey Link)

### Total Station Accessories

- 360 degree prism
- Single prism assembly
- Triple prism assembly
- OP Tribrach
- Prism pole
- Bi-pod
- Wood tripod
- Aluminum tripod

### Radius "Motorola" Radios & Accessories\*

- GP-100 2 watt
- GP-200 4 watt
- P1225 1 & 5 watt
- \*Radio package includes: 2 radios, 2 nylon cases, 2 speaker mic, 2 extra batteries

## Total Station Packages

### Package "A" – Instrument Only

- GTS-800/820 series (motorized)
- GPT-8200 series (motorized & reflectorless)
- GPT-7000/6000 series (reflectorless)
- GPT-7000i (reflectorless & digital camera)
- GTS-700/600 series
- GPT-3000 series (reflectorless)
- GTS-230 series

### Package "B" –

### Instrument Plus Prism, Prism Pole, and Tripod

- GTS-800 series (motorized)
- GPT-8200 series (motorized & reflectorless)
- GPT-7000/6000 series (reflectorless)
- GPT-7000i (reflectorless & digital camera)
- GTS-720/600 series
- GPT-3000 series (reflectorless)
- GTS-230 series

### Package "C" – Traverse Package

### Instrument, 3 tripods, 2 prisms, 2 OPT Tribachs w/Adapters

- GTS-800 series (motorized)
- GPT-8200 series (motorized & reflectorless)
- GPT-7000/6000 series (reflectorless)
- GTS-720/600 series
- GPT-3000 series (reflectorless)
- GTS-230 series

## Digital Level – Auto Level – Transit/Theodolite

### Electronic Digital Level –

DL-102C digital level

\* System includes: digital level, download cable to PC, PC software, tripod, fiberglass rod

### Auto Levels\*

- AT-G2 32X
- AT-G3 30X
- At-G6 24X
- AT-G7/AT-22 22X

\* All Auto level rentals include 1 tripod and 1 rod

### Transits/Theodolites\*

DT-209 10"

\* All Transit/Theodolite rentals include 1 tripod and 1 rod

### Accessories

- Contractor's 8' rod
- Fiberglass rod 25'
- 13.5' Philly rod
- Aluminum tripod
- Wood tripod

**TOPCON CALIFORNIA CAN NOT GUARANTEE NETWORK COVERAGE • MINIMUM 2 DAY RENTAL • 25% DISCOUNT ON SERVICE RENTALS**

Rental options include the conversion from rental to purchase. Topcon California will apply 100% of the rental **paid** for the first 30 days.

For rental periods beyond 30 days 75% of the rental **paid** will apply toward the purchase price up to 80% of the stated rental value.

**NO** credit will be issued for **LATE** rental payments.

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Topcon California is well known in the industry for their servicing capabilities. We receive repairs for all over the United States. Our work comes in from surveyors, engineers, construction companies and even other surveying instrument dealers. We have been focused on the service side of our business from the very beginning. Regardless of the required repairs, we have the equipment and the personnel to tackle the job.

Experience, training and the proper tooling is what makes the difference between an average service center and an excellent service center. We have more than 30 years of combined experience repairing surveying instruments of all kinds. All of our staff members are regularly undergoing specialized training courses. As you can see from the pictures, our service center is equipped with all of the necessary testing equipment. We have full service capabilities from auto levels all the way to GPS and robots.

Topcon California is a service orientated company. We know that if we can provide superior instrument repairs and superior customer service, we will be your vendor of choice. This is our overall goal. We are here to win your business!





*Machine Control, Laser  
& GPS Catalog*

*3380 Industrial Blvd. Suite 105  
West Sacramento, CA 95691  
Phone 800-500-8575 Fax 916-374-8329  
[www.topconca.com](http://www.topconca.com)*